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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/641,014	08/17/2000	Dieter Wenninger	BEIERSDORF 634-WCG	4830
27386	7590	01/25/2005	EXAMINER	
NORRIS, MCLAUGHLIN & MARCUS, P.A. 875 THIRD AVE 18TH FLOOR NEW YORK, NY 10022			BISSETT, MELANIE D	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/641,014	Applicant(s) WENNINGER ET AL.	
	Examiner Melanie D. Bissett	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-9 and 13-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2,4-9,13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. The request filed on 15 November 2004 for Continued Examination under 37 CFR 1.114 based on Application No. 09/614014 is acceptable and an RCE has been established. An action on the RCE follows.

Claim Objections

2. Claim 13 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 13 depends from claim 1 and specifies that the adhesive comprises a natural rubber and tackifying resins. However, claim 1 already specifies these limitations. Thus, claim 13 does not further limit claim 1.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-2, 4, 8, and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nitto Denko Corp in view of Yarusso et al.

5. Nitto Denko discloses pressure sensitive adhesives (PSAs) comprising 100 parts by weight of natural rubber, 20-160 parts by weight of a petroleum tackifying resin, and 5-50 parts by weight of a terpene phenol tackifying resin (abstract). The reference teaches including 0.5-20 parts by weight of a diisocyanate crosslinking compound, and the reference also teaches the addition of antioxidants, plasticizers, and other additives to the adhesive composition [0015-0017]. Note that the applicants list polyisocyanates

as thermally labile crosslinkers. The adhesives are made into sheets or tapes by coating the adhesive onto a plastic backing film [0018]. Examples show the adhesive applied to a PET film to form a PSA tape. However, the reference does not specify the amounts of added antioxidants, plasticizers, and fillers or specify the orientation of the plastic backing films. Yarusso teaches PSA compositions applied to backing films, where the adhesives comprise natural rubber and tackifiers (col. 3 lines 46-61).

Antioxidants, fillers, and plasticizers are used in amounts of up to 5 parts by weight, up to 50 parts by weight, and up to 20 parts by weight, respectively. It is the examiner's position that it would have been prima facie obvious to include antioxidants, fillers, and plasticizers in the adhesives of Nitto Denko's invention in any amounts necessary to optimize the adhesives by the additives' known benefits.

6. Also, Yarusso teaches that the adhesives are preferably applied to biaxially oriented PET substrates (col. 3 lines 62-67; col. 5 lines 30-35; col. 11 lines 47-57), showing the biaxially oriented PET substrates as equivalents to unoriented PET substrates in terms of suitability for PET tapes and sheets (examples). It is the examiner's position that it would have been prima facie obvious to use biaxially oriented PET films in the tapes of Nitto Denko to form tapes having equally improved adhesive and cohesive force.

7. Regarding the limitation that the adhesive coatings are "solventlessly prepared", it is noted that the Nitto Denko reference appears to indicate that the adhesives may be prepared with solvent or as a solid [0017]. Regardless, the adhesives made with solvent are dried to form solventless adhesives. It is the examiner's position that the

resulting adhesive-coated tape would be indistinguishable from one made by a solventless method.

8. Regarding claim 8, Nitto Denko applies as above but fails to note the use of release coatings on the thermoplastic films. Yarusso teaches the conventionality of applying a release coating to the backing film (col. 11 lines 46-57), where in one case, the release film serves to allow the backing to be removed at a later time (examples 1-4). It is the examiner's position that it would have been prima facie obvious to apply a release coating onto the backing film to allow the film to be easily removed at a later time.

9. Regarding claims 15-16, limiting the tape to being "suitable for pallet securement", it is noted that the adhesive tapes of the combined invention use the same components as those claimed by the applicant. Thus, it is reasonable to assume that the tapes of the combined invention would be capable of pallet securement and thus would be suitable for pallet securement.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nitto Denko Corp in view of Yarusso et al. as applied to claims 1-2, 4, 8, and 13-16 above, and further in view of The Wiggins Teape Group Limited.

11. Nitto Denko and Yarusso apply as above, teaching natural rubber adhesives on plastic substrates but failing to teach the use of a primer layer between the two layers. Wiggins Teape teaches PSA coated substrates, where primer coats are used to enhance the cohesion and adhesion of the PSA to the substrate (abstract). Natural

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rubbers may be used in both the primer and the adhesive layers (p. 3 lines 17-41).

Therefore, it is the examiner's position that it would have been prima facie obvious to include a primer layer between the adhesive layer and backing layer of Nitto Denko and Yarusso to further enhance the cohesion and adhesion between the PSA layer and the substrate.

12. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nitto Denko Corp in view of Yarusso et al. as applied to claims 1-2, 4, 8, and 13-16 above, and further in view of Müssig et al.

13. Nitto Denko and Yarusso apply as above, teaching natural rubber adhesives on plastic substrates but failing to teach the use of corona or flame treatment of the backing layer. Müssig teaches PSA coated substrates, where corona or flame treatment is used to enhance the adhesion of the PSA to the substrate (col. 5 lines 42-52). Natural rubbers are used in the PSA layers (abstract), and backing films include polyolefins and PET (col. 5 lines 13-19). Therefore, it is the examiner's position that it would have been prima facie obvious to treat the backing layer of Nitto Denko and Yarusso by corona or flame treatment to further enhance the adhesion between the PSA layer and the substrate.

14. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nitto Denko Corp in view of Yarusso et al. as applied to claims 1-2, 4, 8, and 13-16 above, and further in view of Hitachi Chem.

15. Nitto Denko and Yarusso apply as above, teaching natural rubber compositions but failing to teach the use of irradiation curing in addition to the thermal curing. Hitachi teaches PSA compositions comprising natural rubber, a crosslinking agent, and a monomer having an acryloyl group (abstract). The compositions are crosslinked by both irradiation and heat, enhancing cohesion in the adhesive. Thus, it is the examiner's position that the addition of acrylic monomers and the use of irradiation would be prima facie obvious to improve cohesive strength.

16. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nitto Denko Corp in view of Yarusso et al. as applied to claims 1-2, 4, 8, and 13-16 above, and further in view of Hitachi Chem and Yamamoto et al.

17. Nitto Denko and Yarusso apply as above, failing to teach the addition of a polyfunctional acrylate and a photoinitiator. Hitachi teaches PSA compositions comprising natural rubber, a crosslinking agent, and a monomer having acryloyl groups. The examples show compositions having isocyanate and polyfunctional acrylate components, where triacrylate or diacrylate compounds are used in amounts of 5 or 10 parts by weight (compositions of footnotes 6) and 7)). It would have been prima facie obvious to include those monomers in the PSA of Nitto Denko and Yarusso to improve cohesive strength. Yamamoto teaches the conventionality of using photoinitiators in acrylic curing systems to trigger polymerization of the acrylic monomers (col. 4 lines 1-11, 56-67). Thus, it would have been prima facie obvious to include photoinitiators in

the invention of Nitto Denko, Yarusso, and Hitachi to aid the initiation of crosslinking polymerization.

Response to Arguments

18. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie D. Bissett whose telephone number is (571) 272-1068. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Melanie D. Bissett
Patent Examiner
Art Unit 1711